

Yorktown Heights Fire District

Specification for 1916 Commerce Street Temporary Two-Bay Fire Station

1. General Requirements

The Pre-Engineered / Fabricated Building bidder shall provide with a NYS Certified Engineer Seal and certification that the proposed structure complies with:

- **2020 New York State Building Code (IBC 2018)**
 - Applicable provisions of **ASCE/SEI 7-22**
 - 2020 Energy Conservation Construction Code (Zone 5)
 - Wall Insulation: 6” R-20 Faced Blanket w/VRR+ w/1-6 in seal tap(s) Right Handed 3320 SF
 - Roof Insulation: 6” R-49 Faced Blanket w/PSP VRR+ w/1-6 in Seal Tab(s) Right Handed 2340 SF
-

2. Structural Design Criteria Loads must be in conformance with the following Sections of the NYS Building Codes:

- **Section 1606 Dead Loads / Collateral Load: 3.00 psf**
- **Section 1607 Live Loads/ (Primary & Secondary Framing): 20.00 psf**
 - . **Table 1607.1 Minimum Uniformly Distributed Live Loads**
 - . **of the NYS Building Code. Section 1607.7.2 Fire Truck and Emergency Vehicles”**

Wind Load : (Section 1609) Risk Category IV

- Basic Wind Speed (3-second gust): 129.89 Vmph
- Wind Exposure: C
- Wind Importance Factor (Iw): As required by code

Snow Load (Section 1609) (Westchester County, NY)

- Ground Snow Load (Pg): 30.00 psf

- Roof Snow Load (Pf): 25.20 psf
- Snow Exposure Factor: 1.00
- Thermal Factor: 1.00
- Importance Factor: 1.20
- Snow load calculations shall comply with **ASCE/SEI 7-22**

Seismic Load – Category C

- Seismic Importance Factor (I_e): 1.50
- Site Class: D (Default)
- Mapped Spectral Response Acceleration:
 - $S_s = 0.061$
 - $S_1 = 0.061$
- Spectral Response Coefficients:
 - $S_{ds} = 0.097$
 - $S_{d1} = 0.097$
- Seismic Design Category: C

Rainfall

- Rainfall Intensity: $I_1 = 6$ in/hr, $I_2 = 8$ in/hr
-

3. Materials & Fabrication

- Primary structural steel: Minimum Yield Strength $F_y = 50-55$ KSI
 - Field connections: Bolted using ASTM A325 high-strength bolts or greater
 - Welding procedures shall comply with **AWS D1.1**, Section 1.3
-

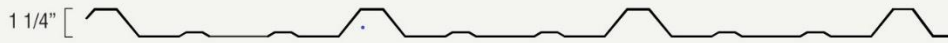
4. Building Dimensions & Configuration

- **Width:** 40 feet (42' – 6" OUT-TO-OUT of Steel)
- **Length:** 50 feet (50' -3" OUT-TO-OUT of Steel)

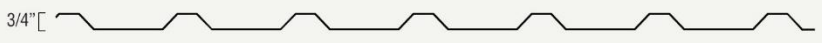
- **Wall Height:** 16 feet

Roof

- Type: Gable
- Minimum Pitch: 3:12
- Gable and eave overhangs: 1 foot
- Standard Panels w/through fasteners, Roof Panels



- Wall Panels w/through fasteners, Wall Panels



5. Exterior Features

- A Trim package must be provided
 - . **Perimeter and roof edge:** base, eave, rake, ridge caps
 - . **Corners and transitions:** inside/outside corners, transition trim
 - . **Openings and Drainage:** head/jamb/sill trim, gutters & downspouts
- Gable ends to include:
 - One (1) 36" x 36" louver at peak

Doors & Openings

Gable End #1:

- Two (2) 12' x 12' overhead doors, equally spaced

Gable End #2:

- Framing for one (1) 36" x 84" walk door centered

Side Wall:

- Left Wall Framing for one (1) 36" x 84" additional walk door located minimum six (6) feet from front left corner of overhead door wall
- Left wall also equally spaced (2) 36" x 36" windows

-

6. Colors (Preferred)

- Roof: Ash Gray (or approved equal)
- Walls: Charcoal Gray (or approved equal)
- Trim: Burnished Slate (or approved equal)
- Walk Doors: White
- Overhead Doors: White
- Gutters: Ash Gray (or approved equal)